

REMARKS

Claims 32, 35, 39-41, 47, 50 and 51 are presented for consideration, with Claims 32 and 47 being independent.

Claims 32 and 47 have been amended to better set forth Applicants' invention and further distinguish it from the cited art.

Initially, Claims 47 and 51 stand rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. In response to this rejection, the Examiner's attention is respectfully directed to Figure 38 and the accompanying specification beginning on page 82, line 10. As shown in the figure, a signal level of a leading edge of a pulse signal rises up to a first predetermined level which is lower than a maximum level of the pulse signal and is maintained at the first predetermined level during a first predetermined time period. Accordingly, it is respectfully submitted that Claims 47 and 51 are fully supported and described in the specification, and thus reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph, is respectfully requested.

Claims 32, 35, 39 and 40 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Murade '996. This rejection is respectfully traversed.

Claim 32 of Applicants' invention relates to an image display apparatus comprised of a plurality of display devices wired in a matrix through a plurality of scanning signal wirings and a plurality of modulated signal wirings, and a driving circuit configured to apply a modulated signal having a modulated pulsewidth to each of the plurality of modulated

signal wirings. The driving circuit has a plurality of transistors connected in parallel to one of the plurality of modulated signal wirings, wherein the plurality of transistors include a first transistor and a second transistor, and a duration of a time period in which the first transistor is in an on state and a duration of a time period in which the second transistor is in an on state are different from each other. As amended, Claim 32 sets forth that at least a part of the time in which the first transistor is in the on state and at least a part of the time period in which the second transistor is in the on state overlap.

Support for the amendments to Claim 32 can be found, for example, in Figure 24 and the accompanying specification beginning on page 60, line 16.

The Murade patent relates to an electro-optical apparatus that includes a liquid crystal device 200 having a TFT array substrate 1. A precharging circuit 201 and a sampling circuit 301 are provided on the array substrate. In the Office Action, the driving circuit is comprised of the precharging circuit and the sampling circuit and includes a plurality of transistors connected in parallel with a plurality of modulated signal wirings. The Office Action asserts that Murade shows that a duration of a time period in which a first transistor is in an on state and a duration of a time period in which a second transistor is in an on state are different from each other, as set forth in Claim 32.

In contrast to Applicants' claimed invention, however, Murade does not teach or suggest, among other features, that at least a part of the time period in which the first transistor is in the on state and at least a part of the time period in which the second transistor is in the on

state overlap. In this regard, the Examiner's attention is respectfully directed to Figure 13 in Murade.

Accordingly, reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. §102(e) is respectfully requested.

Claims 47 and 51 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Amano '607. This rejection is respectfully traversed.

Claim 47 of Applicants' invention relates to an image display apparatus comprised of a plurality of display devices wired in a matrix through a plurality of scanning signal wirings and a plurality of modulated signal wirings, and a driving circuit configured to apply a pulse signal as a modulated signal having a modulated pulsewidth to each of the plurality of modulated signal wirings. The pulse signal has a first portion at a leading edge of the pulse signal and a second portion at a trailing edge of the pulse signal. As claimed, in the first portion, a signal level of the pulse signal rises up to a first predetermined level which is lower than a maximum level of the pulse signal and is maintained at the predetermined level during a first predetermined time period. In the second portion, a signal level of the pulse signal falls down to a second predetermined level which is lower than the maximum level of the pulse signal and is maintained at the second predetermined level during a second predetermined time period.

Amano relates to a video display system that includes a flat panel with an X and Y matrix. Row lines X and column lines Y are driven to adjust the brightness of the video display by changing the combination of a width and an amplitude of a driving pulse. The Office

Action asserts that Amano provides a pulse signal with a first portion at a leading edge and a second portion at the trailing edge that meets the features of Applicants' Claim 47.

It is respectfully submitted, however, that Amano does not teach or suggest, among other features, a pulse signal with a first portion at a leading edge, wherein, in the first portion, a signal level of the pulse signal rises up to a first predetermined level which is lower than a maximum level of the pulse signal and is maintained at the first predetermined level during a first predetermined time period. Figure 9 of Amano shows 16 different driving current pulses, but is not understood to provide a pulse signal with a signal level as set forth in Applicants' Claim 47.

Accordingly, reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. § 102(b) is respectfully requested.

Claims 41 and 50 stand rejected under 35 U.S.C. § 103 as allegedly being obvious over Murade in view of Ohba '150 (Claim 41) or Mackawa '936 (Claim 50).

Ohba relates to a driving display apparatus and was cited for its teaching of an electron emitting device. Mackawa relates to an active matrix display and was cited for its teaching of an overlapping time period of the on states of first and second transistors. Neither secondary citation, however, is understood to compensate for the deficiencies in Murade as discussed above. In Mackawa, each H driver 2 is a horizontal scanning circuit, while a P driver 5 is in the form of control means for sequentially controlling an on or off state of switching elements PSW.

Accordingly, without conceding the propriety of modifying Murade with either of the secondary citations as proposed in the Office Action, such combinations still fail to teach or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of the rejections of Claims 41 and 50 under 35 U.S.C. §103 are respectfully requested.

Therefore, it is submitted that Applicants' invention as set forth in independent Claims 32 and 47 is patentable over the cited art. In addition, dependent Claims 35, 39, 41, 50 and 51 set forth additional features of Applicants' invention. Independent consideration of the dependent claims is respectfully requested.

REQUEST FOR INTERVIEW

Applicants have made an earnest attempt to place the application in condition for allowance. Should the application not be in condition for allowance, the Examiner is respectfully requested to contact Applicants' undersigned attorney for the purposes of scheduling an interview.

CONCLUSION

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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